~~0400~~ 0420   O/PE

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 10/051,643 **ENTERED**

CRF Processing Date: 2/12/2002
Edited by: _____
Verified by: _____ (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line. #2

☐ Edited a format error in the Current Application Data section, specifically:
_____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
_____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
_____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
_____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:
_____

☐ Deleted extra, invalid, headings used by an applicant, specifically:
_____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as_____.

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically:
_____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:
_____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☑ Other: *Seq 203 - corrected amino acid numbering*
_____
_____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

```
        RAW SEQUENCE LISTING              DATE: 02/12/2002
        PATENT APPLICATION:  US/10/051,643    TIME: 18:41:39

        Input Set : A:\PTO.AMC.txt
        Output Set: N:\CRF3\02122002\J051643.raw
```

```
 4 <110> APPLICANT: Watson, James D.
 5          Tan, Paul L. J.
 7 <120> TITLE OF INVENTION: Methods and Compounds for the Treatment
 8        of Immunologically-Mediated Diseases of the Respiratory
 9        System using Mycobacterium Vaccae
12 <130> FILE REFERENCE: 11000.1008c2
14 <140> CURRENT APPLICATION NUMBER: US/10/051,643
14 <141> CURRENT FILING DATE: 2002-01-18
14 <150> PRIOR APPLICATION NUMBER: US09/156,181
15 <151> PRIOR FILING DATE: 1998-09-17
17 <150> PRIOR APPLICATION NUMBER: US 08/996,624
18 <151> PRIOR FILING DATE: 1997-12-23
20 <160> NUMBER OF SEQ ID NOS: 208
22 <170> SOFTWARE: FastSEQ for Windows Version 3.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 25
26 <212> TYPE: PRT
27 <213> ORGANISM: Mycobacterium vaccae
29 <220> FEATURE:
30 <221> NAME/KEY: UNSURE
31 <222> LOCATION: (7)...(7)
33 <400> SEQUENCE: 1
34  Ala Pro Val Gly Pro Gly Xaa Ala Ala Tyr Val Gln Gln Val Pro Asp
35   1               5                   10                  15
36  Gly Pro Gly Ser Val Gln Gly Met Ala
37                  20                  25
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 10
41 <212> TYPE: PRT
42 <213> ORGANISM: Mycobacterium vaccae
44 <220> FEATURE:
45 <221> NAME/KEY: UNSURE
46 <222> LOCATION: (2)...(2)
48 <400> SEQUENCE: 2
49  Met Xaa Asp Gln Leu Lys Val Asn Asp Asp
50   1               5                   10
52 <210> SEQ ID NO: 3
53 <211> LENGTH: 11
54 <212> TYPE: PRT
55 <213> ORGANISM: Mycobacterium vaccae
57 <220> FEATURE:
58 <221> NAME/KEY: UNSURE
59 <222> LOCATION: (2)...(2)
```

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,643   TIME: 18:41:39

        Input Set : A:\PTO.AMC.txt
        Output Set: N:\CRF3\02122002\J051643.raw

```
 61 <400> SEQUENCE: 3
 62 Met Xaa Pro Val Pro Val Ala Thr Ala Ala Tyr
 63  1               5               10
 65 <210> SEQ ID NO: 4
 66 <211> LENGTH: 21
 67 <212> TYPE: PRT
 68 <213> ORGANISM: Mycobacterium vaccae
 70 <400> SEQUENCE: 4
 71  Thr Pro Ala Pro Ala Pro Pro Pro Tyr Val Asp His Val Glu Gln Ala
 72  1               5               10              15
 73  Lys Phe Gly Asp Leu
 74               20
 76 <210> SEQ ID NO: 5
 77 <211> LENGTH: 29
 78 <212> TYPE: PRT
 79 <213> ORGANISM: Mycobacterium vaccae
 81 <220> FEATURE:
 82 <221> NAME/KEY: UNSURE
 83 <222> LOCATION: (25)...(25)
 85 <400> SEQUENCE: 5
 86  Met Gln Ala Phe Asn Ala Asp Ala Tyr Ala Phe Ala Lys Arg Glu Lys
 87  1               5               10              15
 88  Val Ser Leu Ala Pro Gly Val Pro Xaa Val Phe Glu Thr
 89               20                  25
 91 <210> SEQ ID NO: 6
 92 <211> LENGTH: 21
 93 <212> TYPE: PRT
 94 <213> ORGANISM: Mycobacterium vaccae
 96 <220> FEATURE:
 97 <221> NAME/KEY: UNSURE
 98 <222> LOCATION: (6)...(6)
100 <400> SEQUENCE: 6
101  Met Ala Asp Pro Asn Xaa Ala Ile Leu Gln Val Ser Lys Thr Thr Arg
102  1               5               10              15
103  Gly Gly Gln Ala Ala
104               20
106 <210> SEQ ID NO: 7
107 <211> LENGTH: 11
108 <212> TYPE: PRT
109 <213> ORGANISM: Mycobacterium vaccae
111 <400> SEQUENCE: 7
112  Met Pro Ile Leu Gln Val Ser Gln Thr Gly Arg
113  1               5               10
115 <210> SEQ ID NO: 8
116 <211> LENGTH: 14
117 <212> TYPE: PRT
118 <213> ORGANISM: Mycobacterium vaccae
120 <220> FEATURE:
121 <221> NAME/KEY: UNSURE
```

RAW SEQUENCE LISTING   DATE: 02/12/2002
PATENT APPLICATION: US/10/051,643   TIME: 18:41:39

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\02122002\J051643.raw

```
122 <222> LOCATION: (2)...(2)
124 <221> NAME/KEY: UNSURE
125 <222> LOCATION: (6)...(6)
127 <400> SEQUENCE: 8
128 Met Xaa Asp Pro Ile Xaa Leu Gln Leu Gln Val Ser Ser Thr
129  1               5                  10
131 <210> SEQ ID NO: 9
132 <211> LENGTH: 16
133 <212> TYPE: PRT
134 <213> ORGANISM: Mycobacterium vaccae
136 <400> SEQUENCE: 9
137 Lys Ala Thr Tyr Val Gln Gly Gly Leu Gly Arg Ile Glu Ala Arg Val
138  1               5                  10                  15
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 9
142 <212> TYPE: PRT
143 <213> ORGANISM: Mycobacterium vaccae
145 <220> FEATURE:
146 <221> NAME/KEY: UNSURE
147 <222> LOCATION: (2)...(2)
149 <400> SEQUENCE: 10
150 Lys Xaa Gly Leu Ala Asp Leu Ala Pro
151  1               5
153 <210> SEQ ID NO: 11
154 <211> LENGTH: 14
155 <212> TYPE: PRT
156 <213> ORGANISM: Mycobacterium vaccae
158 <220> FEATURE:
159 <221> NAME/KEY: UNSURE
160 <222> LOCATION: (12)...(12)
161 <223> OTHER INFORMATION: Residue can be either Glu or Ile
163 <221> NAME/KEY: UNSURE
164 <222> LOCATION: (2)...(2)
166 <400> SEQUENCE: 11
167 Lys Xaa Tyr Ala Leu Ala Leu Met Ser Ala Val Xaa Ala Ala
168  1               5                  10
170 <210> SEQ ID NO: 12
171 <211> LENGTH: 11
172 <212> TYPE: PRT
173 <213> ORGANISM: Mycobacterium vaccae
175 <220> FEATURE:
176 <221> NAME/KEY: UNSURE
177 <222> LOCATION: (10)...(10)
179 <400> SEQUENCE: 12
180 Lys Asn Pro Gln Val Ser Asp Glu Leu Xaa Thr
181  1               5                  10
183 <210> SEQ ID NO: 13
184 <211> LENGTH: 21
185 <212> TYPE: PRT
```

```
186 <213> ORGANISM: Mycobacterium vaccae
188 <220> FEATURE:
189 <221> NAME/KEY: UNSURE
190 <222> LOCATION: (9)...(9)
192 <400> SEQUENCE: 13
193  Ala Pro Ala Pro Ala Ala Pro Ala Xaa Gly Asp Pro Ala Ala Val Val
194  1               5                   10                  15
195  Ala Ala Met Ser Thr
196             20
198 <210> SEQ ID NO: 14
199 <211> LENGTH: 15
200 <212> TYPE: PRT
201 <213> ORGANISM: Mycobacterium vaccae
203 <220> FEATURE:
204 <221> NAME/KEY: UNSURE
205 <222> LOCATION: (5)...(5)
207 <400> SEQUENCE: 14
208  Glu Ala Glu Val Xaa Tyr Leu Gly Gln Pro Gly Glu Leu Val Asn
209  1               5                   10                  15
211 <210> SEQ ID NO: 15
212 <211> LENGTH: 15
213 <212> TYPE: PRT
214 <213> ORGANISM: Mycobacterium vaccae
216 <220> FEATURE:
217 <221> NAME/KEY: UNSURE
218 <222> LOCATION: (2)...(2)
219 <223> OTHER INFORMATION: Residue can be either Gly or Ala
221 <221> NAME/KEY: UNSURE
222 <222> LOCATION: (15)...(15)
223 <223> OTHER INFORMATION: Residue can be either Pro or Ala
225 <221> NAME/KEY: UNSURE
226 <222> LOCATION: (7)...(7)
228 <400> SEQUENCE: 15
229  Ala Xaa Val Val Pro Pro Xaa Gly Pro Pro Ala Pro Gly Ala Xaa
230  1               5                   10                  15
232 <210> SEQ ID NO: 16
233 <211> LENGTH: 15
234 <212> TYPE: PRT
235 <213> ORGANISM: Mycobacterium vaccae
237 <400> SEQUENCE: 16
238  Ala Pro Ala Pro Asp Leu Gln Gly Pro Leu Val Ser Thr Leu Ser
239  1               5                   10                  15
241 <210> SEQ ID NO: 17
242 <211> LENGTH: 25
243 <212> TYPE: PRT
244 <213> ORGANISM: Mycobacterium vaccae
246 <400> SEQUENCE: 17
247  Ala Thr Pro Asp Trp Ser Gly Arg Tyr Thr Val Val Thr Phe Ala Ser
248  1               5                   10                  15
```

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Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\02122002\J051643.raw

```
249  Asp Lys Leu Gly Thr Ser Val Ala Ala
250              20                  25
252  <210> SEQ ID NO: 18
253  <211> LENGTH: 25
254  <212> TYPE: PRT
255  <213> ORGANISM: Mycobacterium vaccae
257  <220> FEATURE:
258  <221> NAME/KEY: UNSURE
259  <222> LOCATION: (15)...(15)
260  <223> OTHER INFORMATION: Residue can be either Ala or Arg
262  <221> NAME/KEY: UNSURE
263  <222> LOCATION: (23)...(23)
264  <223> OTHER INFORMATION: Residue can be either Val or Leu
266  <221> NAME/KEY: UNSURE
267  <222> LOCATION: (16)...(16)
269  <400> SEQUENCE: 18
270  Ala Pro Pro Tyr Asp Asp Arg Gly Tyr Val Asp Ser Thr Ala Xaa Xaa
271  1           5                   10              15
272  Ala Ser Pro Pro Thr Leu Xaa Val Val
273              20                  25
275  <210> SEQ ID NO: 19
276  <211> LENGTH: 8
277  <212> TYPE: PRT
278  <213> ORGANISM: Mycobacterium vaccae
280  <400> SEQUENCE: 19
281  Glu Pro Glu Gly Val Ala Pro Pro
282  1               5
284  <210> SEQ ID NO: 20
285  <211> LENGTH: 25
286  <212> TYPE: PRT
287  <213> ORGANISM: Mycobacterium vaccae
289  <220> FEATURE:
290  <221> NAME/KEY: UNSURE
291  <222> LOCATION: (21)...(22)
293  <400> SEQUENCE: 20
294  Glu Pro Ala Gly Ile Pro Ala Gly Phe Pro Asp Val Ser Ala Tyr Ala
295  1           5                   10              15
296  Ala Val Asp Pro Xaa Xaa Tyr Val Val
297              20                  25
299  <210> SEQ ID NO: 21
300  <211> LENGTH: 15
301  <212> TYPE: PRT
302  <213> ORGANISM: Mycobacterium vaccae
304  <220> FEATURE:
305  <221> NAME/KEY: UNSURE
306  <222> LOCATION: (7)...(7)
308  <400> SEQUENCE: 21
309  Ala Pro Val Gly Pro Gly Xaa Ala Ala Tyr Val Gln Gln Val Pro
310  1           5                   10              15
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: **US/10/051,643**

DATE: 02/12/2002
TIME: 18:41:40

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\02122002\J051643.raw**

```
L:14 M:270 C: Current Application Number differs, Replaced Current Application No
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:1
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:49 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:2
L:49 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:62 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:3
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:88 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:5
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:101 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:6
L:101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:128 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:8
L:128 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:150 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:10
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:180 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:12
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:193 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:13
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:208 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:14
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:296 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:20
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:309 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:21
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:351 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:25
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:1276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56
L:1290 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57
L:1308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:1369 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:63
L:1369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1371 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:63
L:1371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:1386 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:64
L:1386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64
L:1405 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:65
L:1405 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65
L:1407 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:65
```

VERIFICATION SUMMARY   DATE: 02/12/2002
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Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF3\02122002\J051643.raw**

```
L:1407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65
L:1526 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:2095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:2108 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:102
L:2108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102
L:2129 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:103
L:2129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:2131 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:103
L:2131 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:2153 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:105
L:2153 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105
L:2192 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:107
L:2192 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107
L:2266 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:111
L:2266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2295 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:112
L:2295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112
L:2572 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:120
L:2572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120
L:2573 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:120
L:2573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120
L:2632 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:121
L:2632 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:2634 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:121
L:2634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:121
L:2948 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:134
L:2948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134
L:3016 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:136
L:3016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136
L:3035 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:137
L:3035 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:137
L:3048 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:138
L:3048 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138
L:3082 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:140
L:3082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140
L:3189 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:146
L:3189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:146
L:3256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:148
L:3279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:149
L:3364 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:153
L:3403 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:154
L:3965 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:171
L:3966 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:171
L:4026 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:172
L:4028 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:172
L:4286 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:177
L:4566 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:185
L:4567 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:185
L:4607 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:186
```

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Input Set : **A:\PTO.AMC.txt**
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```
L:4634 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:187
L:4687 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:191
L:4704 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:192
L:5053 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:203
```